

(19) World Intellectual Property Organization International Bureau



(43) International Publication Date
10 March 2005 (10.03.2005)

PCT

(10) International Publication Number
WO 2005/021766 A1

(51) International Patent Classification⁷: C12N 15/85, C07K 14/38, 14/21, A01K 67/027, C12Q 1/68, C07K 14/21, C07C 47/06

(21) International Application Number:
PCT/EP2004/051997

(22) International Filing Date:
2 September 2004 (02.09.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
03405635.8 2 September 2003 (02.09.2003) EP

(71) Applicants and

(72) Inventors: FUSSENEGGER, Martin [CH/CH]; Bergacker 76, CH-8046 Zürich (CH). WEBER, Wilfried [DE/CH]; Lachenacker 16, CH-8049 Zürich (CH).

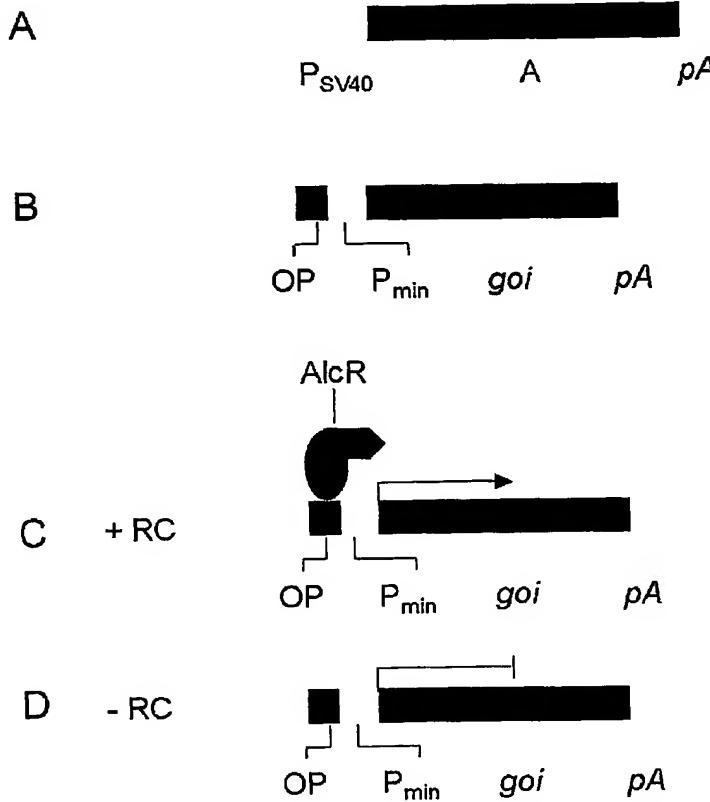
(74) Agent: BECKER, Konrad; Aeschenvorstadt 24, P.O. Box 318, CH-4010 Basel (CH).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI,

[Continued on next page]

(54) Title: REGULATABLE GENE EXPRESSION IN MAMMALIAN CELLS AND MAMMALS



(57) Abstract: The present invention discloses mammalian cells useful for regulated gene expression in response to compounds being gaseous or liquid at the cultivation temperature of said mammalian cell, and non-human mammals comprising such mammalian cells. The invention further discloses methods for producing proteins in mammalian cells in a regulated way in response to inducing gaseous or liquid compounds. The invention is further directed to isolated nucleic acids useful for constructing said mammalian cells.



SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ,
GW, ML, MR, NE, SN, TD, TG).

— *with sequence listing part of description published separately in electronic form and available upon request from the International Bureau*

Published:

- *with international search report*
- *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.